

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) An ink jet printing apparatus for printing on a substrate, the printer comprising:

a printhead arrangement including a plurality of ink jet printheads for emitting ink droplets towards a surface of the substrate wherein the printheads are apparatus is adapted to hold the printheads substantially be stationary while droplets are emitting ink emitted from the printheads;

a plurality of rollers arranged to move the substrate relative to past the printheads during the emission of the droplets from the printheads; and

a the apparatus further including a pressure source

wherein the pressure source is arranged to apply a negative gauge pressure to the substrate to hold the substrate to the rollers in the region of the printhead arrangement.

2. (Original) Apparatus according to claim 1, wherein the apparatus is adapted to print onto the surfaces of a plurality of discrete substrates.

3. (Previously Presented) Apparatus according to claim 1, wherein the apparatus includes at least three rollers arranged to move the substrate relative to the printheads.

4. (Previously Presented) Apparatus according to claim 1, wherein a roller is mounted substantially parallel to an adjacent roller such that the angle of the adjacent rollers is not more than 6 milliradians from parallel.

5. (Cancelled).

6. (Previously Presented) Apparatus according to claim 1, where the negative gauge pressure is applied to the substrate in a region between adjacent rollers.

7. (Previously Presented) Apparatus according to claim 1, further including an element arranged between the rollers adjacent the substrate.

8. (Original) Apparatus according to claim 7, wherein the element is arranged to restrict the airflow between the rollers.

9. (Previously Presented) Apparatus according to claim 7, wherein the element is arranged to reduce deformation of the substrate between the rollers.

10. (Previously Presented) Apparatus according to claim 1, further including a guide for guiding a leading edge of the substrate.

11. (Previously Presented) Apparatus according to claim 1, wherein the substrate comprises a substantially rigid material.

12. (Previously Presented) Apparatus according to claim 1, wherein the arrangement is such that the substrate is mounted, during printing, on a deformable surface.

13. (Previously Presented) Apparatus according to claim 1, wherein the apparatus is adapted to move the substrate at a speed greater than 1 m/s.

14. (Previously Presented) Apparatus according to claim 1, wherein the system is adapted to print a colour image.

15. (Previously Presented) Apparatus according to claim 1, wherein the apparatus is adapted to print an image having a resolution of greater than 120 dpi.

16. (Currently Amended) A transport device for moving a substrate past printheads in an ink jet printer, the device comprising:

a plurality of rollers arranged to move the substrate ~~relative to~~ past the printheads during deposition of droplets on the substrate; and

a pressure source

wherein the pressure source is arranged to apply a negative gauge pressure to the substrate to hold the substrate to the rollers in the region of the printheads.

17. (Currently Amended) A method of printing a substrate in an ink jet printer comprising a plurality of printheads, a plurality of rollers and a pressure source, the method comprising the steps of:

moving the substrate on the rollers relative to the printheads during printing; and
applying a negative gauge pressure to the substrate to hold the substrate to the rollers in the region of the printheads,

wherein the printheads are substantially stationary during emission of ~~ink~~ droplets towards the substrate.

18-20. (Cancelled).

21. (Previously Presented) Apparatus according to claim 7, wherein the element is arranged to be spaced apart from the substrate.

22. (Currently Amended) Apparatus according to claim 7, wherein the element is ~~substantially~~ substantially nonporous.

23. (Previously Presented) Apparatus according to claim 1, wherein the rollers are substantially nonporous.

24. (Currently Amended) Apparatus according to claim 1, wherein the arrangement is such that no roller is arranged so as to contact the surface of the substrate to be printed.